

General

Title

Medication errors: percentage of medical prescriptions free of non-recommended abbreviations, symbols or dose designations.

Source(s)

Ministry of Health. Safe practices indicators project: background, summary of methods and measurement strategies. Madrid: Ministry of Health; 2009 Feb 20. 97 p.

Measure Domain

Primary Measure Domain

Process

The validity of measures depends on how they are built. By examining the key building blocks of a measure, you can assess its validity for your purpose. For more information, visit the [Measure Validity](#) page.

Secondary Measure Domain

Does not apply to this measure

Brief Abstract

Description

This measure is used to determine the percentage of medical prescriptions that are free of non-recommended abbreviations, symbols or dose designations, sampling the first and last (discharge report) prescription of each patient.

Rationale

Experiential data show that using standardized abbreviations and symbols and standardized phraseology reduces medication errors.

Main aim of indicator: to enhance patient safety by reducing the number of prescriptions containing

abbreviations, symbols or dose designations that may cause medication errors.

Primary Clinical Component

Medication errors; medical prescriptions free of non-recommended abbreviations, symbols or dose designations

Denominator Description

Number of prescriptions assessed

Numerator Description

Number of prescriptions (first and last) without errors x 100 (see the related "Numerator Inclusions/Exclusions" field)

Evidence Supporting the Measure

Evidence Supporting the Criterion of Quality

A formal consensus procedure involving experts in relevant clinical, methodological, and organizational sciences

A systematic review of the clinical literature

One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed journal

Evidence Supporting Need for the Measure

Need for the Measure

Overall poor quality for the performance measured

Variation in quality for the performance measured

Evidence Supporting Need for the Measure

Ministerio de Sanidad y Consumo. Indicadores de buenas practicas sobre seguridad del paciente. Resultados de su medicion en una muestra de hospitales del sistema nacional de salud España±ol. Madrid: Ministerio de Sanidad y Consumo; 2008. 95 p.

State of Use of the Measure

State of Use

Current routine use

Current Use

Internal quality improvement

Application of Measure in its Current Use

Care Setting

Hospitals

Professionals Responsible for Health Care

Physicians

Lowest Level of Health Care Delivery Addressed

Single Health Care Delivery Organizations

Target Population Age

Unspecified

Target Population Gender

Either male or female

Stratification by Vulnerable Populations

Unspecified

Characteristics of the Primary Clinical Component

Incidence/Prevalence

12.4 percent \pm 0.3 (95 percent CI) of prescriptions are free of non-recommended abbreviations, symbols or dose designations.

Evidence for Incidence/Prevalence

Ministerio de Sanidad y Consumo. Indicadores de buenas practicas sobre seguridad del paciente. Resultados de su medicion en una muestra de hospitales del sistema nacional de salud España. Madrid: Ministerio de Sanidad y Consumo; 2008. 95 p.

Association with Vulnerable Populations

Unspecified

Burden of Illness

Unspecified

Utilization

Unspecified

Costs

Unspecified

Institute of Medicine (IOM) Healthcare Quality Report Categories

IOM Care Need

End of Life Care

Getting Better

Living with Illness

Staying Healthy

IOM Domain

Effectiveness

Safety

Data Collection for the Measure

Case Finding

Users of care only

Description of Case Finding

Number of prescriptions assessed

Denominator Sampling Frame

Patients associated with provider

Denominator Inclusions/Exclusions

Inclusions

Number of prescriptions assessed

Exclusions

None

Relationship of Denominator to Numerator

All cases in the denominator are equally eligible to appear in the numerator

Denominator (Index) Event

Institutionalization

Therapeutic Intervention

Denominator Time Window

Time window brackets index event

Numerator Inclusions/Exclusions

Inclusions

Number of prescriptions (first and last) without errors x 100*

*The aspects studied are:

Abbreviations and symbols not recommended for use to indicate dose, form and frequency of administration

Dose designations, use of decimals and zeros

Initials of chemical formulas and pharmaceutical products

Abbreviations and initials of drugs

Note: Refer to the original measure documentation for a listing of abbreviations and symbols not recommended for use to indicate dose, form and frequency of administration.

Exclusions

None

Measure Results Under Control of Health Care Professionals, Organizations and/or Policymakers

The measure results are somewhat or substantially under the control of the health care professionals, organizations and/or policymakers to whom the measure applies.

Numerator Time Window

Institutionalization

Data Source

Administrative data

Medical record

Level of Determination of Quality

Individual Case

Pre-existing Instrument Used

None

Computation of the Measure

Scoring

Rate

Interpretation of Score

Better quality is associated with a higher score

Allowance for Patient Factors

Unspecified

Standard of Comparison

Internal time comparison

Evaluation of Measure Properties

Extent of Measure Testing

After pilot testing, the set of indicators has been measured in a random sample of 25 Spanish hospitals, stratified by hospital size. The main objective has been to field test the feasibility of measurement in the various settings representing real life situations in the context of the Spanish Health Care System.

Both the whole indicators validation report and the results of the baseline measurement in a sample of the Spanish National Health Service (NHS) hospitals may be accessed and downloaded from the Spanish Ministry of Health web page (in Spanish):

[Validation report](#)

[Results of baseline measurement in Spanish NHS hospitals](#)

Evidence for Reliability/Validity Testing

Ministerio de Sanidad y Consumo. Construcción y validación de indicadores de buenas prácticas sobre seguridad del paciente. Madrid: Ministerio de Sanidad y Consumo; 2008. 178 p.

Ministerio de Sanidad y Consumo. Indicadores de buenas prácticas sobre seguridad del paciente. Resultados de su medición en una muestra de hospitales del sistema nacional de salud España. 2010.

Identifying Information

Original Title

Percentage of medical prescriptions free of non-recommended abbreviations, symbols or dose designations.

Measure Collection Name

Safe Practices Indicators Project

Measure Set Name

Facilitating Information Transfer and Clear Communication

Measure Subset Name

Use of Standardized Abbreviations and Dose Designations

Submitter

Spanish Agency for Healthcare Quality of the Spanish Ministry of Health - National Government Agency [Non-U.S.]

Developer

Grupo de Investigaci3n sobre Gesti3n de la Calidad en Servicios de Salud, University of Murcia, under contract to the Spanish Ministry of Health - National Government Agency [Non-U.S.]

Funding Source(s)

Agency for Quality, Spanish Ministry of Health

Composition of the Group that Developed the Measure

Saturno, Pedro J., MD, DrPH; Group Director and Project PI

Castillo, Carmen; L3pez, M. Jos3; Ram3n, Teresa; Nurses

Carrillo, Andr3s, MD; Intensive Care Specialist

Iranzo, M. Dolores; Hospital pharmacist

Soria, Victor, MD; Surgeon

Financial Disclosures/Other Potential Conflicts of Interest

Project entirely financed by the Spanish Ministry of Health.

Adaptation

Measure was not adapted from another source.

Release Date

2009 Feb

Measure Status

This is the current release of the measure.

Source(s)

Ministry of Health. Safe practices indicators project: background, summary of methods and measurement strategies. Madrid: Ministry of Health; 2009 Feb 20. 97 p.

Measure Availability

The individual measure, "Percentage of Medical Prescriptions Free of Non-recommended Abbreviations, Symbols or Dose Designations," is published in "Safe Practices Indicators Project: Background, Summary of Methods and Measurement Strategies."

For more information, contact:

Ministry of Health and Social Policy, Paseo del Prado, 18-20, planta baja, esquina con Lope de Vega. 28014 Madrid; Phone: +34 901 400 100; Fax: +34 915 96 44 80; Web site:

www.msc.es/en/home.htm .

OR

Pedro J. Saturno, Facultad de Medicina, Universidad de Murcia, 30100 Espinardo-Murcia (Spain);

Phone: 868 883 948; Fax: +34 868 883947; E-mail: psaturno@um.es; Web site:

<http://www.calidadsalud.com> .

Companion Documents

The following are available:

Ministerio de Sanidad y Consumo. Construcc  n y validaci  n de indicadores de buenas practicas sobre seguridad del paciente. Madrid: Ministerio de Sanidad y Consumo; 2008. 178 p. This document is available in Portable Document Format (PDF) from the [Ministry of Health and Social Policy Web site](#) (in Spanish).

Ministerio de Sanidad y Consumo. Indicadores de buenas practicas sobre seguridad del paciente. Resultados de su medici  n en una muestra de hospitales del sistema nacional de salud Espa   ol. Madrid: Ministerio de Sanidad y Consumo; 2008. 95 p. This document is available in PDF from the

NQMC Status

This NQMC summary was completed by ECRI Institute on August 21, 2009. The information was verified by the measure developer on October 16, 2009.

Copyright Statement

No copyright restrictions apply.

Disclaimer

NQMC Disclaimer

The National Quality Measures Clearinghouse (NQMC) does not develop, produce, approve, or endorse the measures represented on this site.

All measures summarized by NQMC and hosted on our site are produced under the auspices of medical specialty societies, relevant professional associations, public and private organizations, other government agencies, health care organizations or plans, individuals, and similar entities.

Measures represented on the NQMC Web site are submitted by measure developers, and are screened solely to determine that they meet the [NQMC Inclusion Criteria](#).

NQMC, AHRQ, and its contractor ECRI Institute make no warranties concerning the content or its reliability and/or validity of the quality measures and related materials represented on this site. Moreover, the views and opinions of developers or authors of measures represented on this site do not necessarily state or reflect those of NQMC, AHRQ, or its contractor, ECRI Institute, and inclusion or hosting of measures in NQMC may not be used for advertising or commercial endorsement purposes.

Readers with questions regarding measure content are directed to contact the measure developer.